

Amendments to the Claims:

1. (Original) An adjustable support mechanism comprising
a first bracket;
a second bracket;
a connecting member pivotally coupled to the first bracket at a first position and pivotally coupled to the second bracket at a second position spaced from the first position; and
a linking member coupled to the connecting member so as to be movable in relation to the connecting member,
wherein the linking member is arranged to engage the first bracket and the second bracket such that pivotal movement of the first bracket in a first rotational direction is related to movement of the linking member, which is in turn related to pivotal movement of the second bracket also in the first rotational direction.

2. (Currently amended) An adjustable support mechanism comprising:
a first bracket;
a second bracket;
a connecting member pivotally coupled to the bracket at a first position and pivotally coupled to the second bracket at a second position spaced from the first position; and
a linking member coupled to the connecting member so as to be movable transversely in relation to a line between the first position and the second position,
wherein the linking member is arranged to engage the first bracket such that pivotal movement of the first bracket in a first rotational direction is related to transverse movement of the linking member in a first transverse direction,
wherein the linking member is also arranged to engage the second bracket such that pivotal movement of the second bracket in the first rotational direction is also related to the transverse movement of the linking member in the first transverse direction.

3. (Original) An adjustable support mechanism comprising:
a first bracket;

a second bracket;

a connecting member pivotally coupled to the first bracket at a first position and pivotally coupled to the second bracket at a second position spaced from the first position; and

a linking member pivotally coupled to the connecting member so as to be pivotable about a point midway along a line between the first position and the second position,

wherein the linking member is arranged to engage the first bracket such that pivotal movement of the first bracket in a first rotational direction is related to pivotal movement of the linking member in a first pivotal direction,

wherein the linking member is also arranged to engage the second bracket such that pivotal movement of the second bracket in the first rotational direction is also related to the pivotal movement of the linking member in the first pivotal direction.

4. (New) The support mechanism according to claim 1, wherein said linking member is coupled to said connecting member so as to be movable transversely in relation to a line between the first position and the second position.

5. (New) The support mechanism according to claim 1, wherein said first bracket and said second bracket are each coupled to said connecting member with a screw drive mechanism, said screw drive mechanism comprising a cylinder with a periphery.

6. (New) The support mechanism according to claim 5, wherein said linking member comprises a first end and a second end, said first and second ends having collars formed thereon engaging said first bracket and said second bracket by receiving and circumferentially surrounding said cylinders.

7. (New) The support mechanism according to claim 6, wherein said cylinders comprise a helical groove extending around said periphery.

8. (New) The support mechanism according to claim 7, wherein said collars further comprise an inwardly projecting follower pin that is received by the groove in the cylinder of said screw drive.

9. (New) The support mechanism according to claim 8, wherein the groove in the cylinder of said screw drive has a direction of rotation that is the same for each of said first bracket and said second bracket such that pivotal rotation of one of said brackets causes corresponding pivotal rotation in the other of said brackets.

10. (New) The support mechanism according to claim 8, wherein the groove in the cylinder of said screw drive has a pitch that is the same for each of said first bracket and said second bracket such that pivotal rotation of one of said brackets causes corresponding pivotal rotation in the other of said brackets.

11. (New) The support mechanism according to claim 5, wherein said cylinder comprises a plurality of parallel grooves, each of said grooves making less than a complete rotation around said periphery, and wherein said linking member comprises a first end and a second end, each of said ends comprising a plurality of follower pins, each of which project into a corresponding one of said parallel grooves.

12. (New) The support mechanism according to claim 5, wherein the periphery of said cylinder comprises one or more grooves, and wherein said linking member comprises a first end and a second end, said first and second ends having a half nut or full nut attached thereto, said half nut or full nut having an inwardly projecting thread on an inside surface thereof for engaging said one or more grooves.

13. (New) The support mechanism according to claim 5, wherein the periphery of said cylinder comprises a helical mesh teeth arrangement, said linking member is pivotally connected to said connecting member, and wherein said linking member comprises a first end and a second end, said first and second ends having a helical mesh teeth arrangement for

engaging the helical mesh teeth arrangement formed in the periphery of said cylinders, thereby forming a helical crossed gear arrangement.

14. (New) The support mechanism according to claim 5, wherein said mechanism comprises two linking members, each of said linking members having a first end and a second end, said ends having collars formed thereon engaging said first bracket and said second bracket by receiving and circumferentially surrounding said cylinders.

15. (New) The support mechanism according to claim 14, wherein said cylinders each comprise a helical groove extending around said periphery, and wherein said helical groove has directions of rotation toward either end of said screw drive that are opposite in direction such that rotation of the screw drive in one direction causes said linking members to move toward one another and rotation of the screw drive in an opposite direction causes said linking members to move apart from one another.

14. (New) The support mechanism according to claim 1, further comprising biasing means for biasing said linking member to a rest position.

15. (New) The support mechanism according to claim 1, further comprising a locking mechanism.

16. (New) The support mechanism according to claim 15, wherein said first bracket and said second bracket are each coupled to said connecting member with a drive mechanism comprising a cylinder having a shaft extending therethrough and further extending through a sidewall of said connecting member, and wherein said locking mechanism comprises a knob with a jam on an inner face thereof, said knob being threadingly connected to said shaft such that when the knob is rotated in one direction, said jam contacts the sidewall of said connecting member, thereby preventing rotation of said bracket.

17. (New) The support mechanism according to claim 15, wherein said locking mechanism is engaged by a weight on one of said first bracket and said second bracket.

18. (New) A method of adjusting the position of a movable object relative to an immovable object, said method comprising:

providing a support mechanism according to claim 1;

attaching one of said first or said second brackets to said immovable object and the other said brackets to said movable object; and

positionally adjusting said movable object.